NEW ENGLAND FARMER.

PUBLISHED BY GEO. C. BARRETT, NO. 52, NORTH MARKET STREET, (AT THE AGRICULTURAL WAREHOUSE.)—T. G. FESSENDEN, EDITOR.

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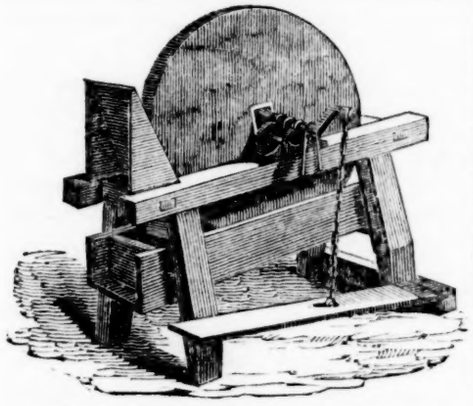

GRINDSTONES ON FRICTION ROLLERS.

THE hanging of grindstones on Friction Rollers, and moving them with a foot-treadle is found to be a great improvement. The rollers almost annihilate friction, and as it is very easy to give them motion by the foot, the labor of one man is saved, and the person who is grinding can govern the stone more to his mind by having the complete control of his work.

Grindstones, hung in this manner, are coming daily more and more into use; and from the frequency with which they are employed, the apparatus sketched above, may well be numbered among the most important implements for facilitating the labors of the farmer as well as many classes of mechanics.

Stones of different sizes, and fitted as above may be obtained at the Agricultural Warehouse, Nos. 51 & 52 North Market street, Boston.

For the New-England Farmer.

SKINLESS OATS.

New York, June 28th, 1834.

MR. EDITOR, For the benefit of the agricultural interests of my native State, I enclose this slip taken from a stray paper, which, I hope may prove of some benefit to your valuable Society of Agriculture. J. BROWN.

Skinless Oats. At a late meeting of the Warwickshire Agricultural Society, a specimen of the *Avenaiva Farina*, or skinless oat was produced by the Rev. Mr. Knott, which had been plucked that morning out of a piece of ground belonging to that gentleman at Wormleighton. It was produced from seed furnished to him by Mr. Trucker, of Heanton, Punchardon, near Barnstable, Devonshire. According to the account furnished by that gentleman, it was grown in the season of 1830, for the first time it was ever produced in Great Britain, by Thomas Drenzy, Esq. of Clehemen Hall, who obtained the seed through a friend of his at Rotterdam, whither it was imported from Shantag a remote district in China, and was quite unknown to Europeans till within these three years. The advantages which this extraordinary and valuable grain possesses over all other kinds of oats are numerous: When threshed from the sheaf it is exactly like oatmeal, and it is fit for immediate use for culinary purposes, and every other sort which oatmeal is consumed for, the grain being quite free from every particle of rind and husk. The flavor is delicious, and it contains much more farinaceous matter. There is of course considerable saving of oats, and the expense of kiln-drying, &c. and one peck contains more nutritious food for a horse, than three pecks of common oats. The produce is most astonishing, the average being twenty-six barrels, of fourteen stone to the Irish acre, the exact quantity grown by Mr. Drenzy on one acre. It was not sown till the 4th of May, 1830, and was reaped early in August in the same year.—It is remarkably hardy, and well adapted to this climate.—*London Periodical.*

For the New England Farmer.

THE CICADA.

MR. FESSENDEN—Much alarm has been created among those whose reliance for a livelihood is on the fruits of the earth, by the annunciation that the land is this year to be overspread with Locusts. Many stories of the devastations committed by this fifth plague of Pharaoh have been collected and circulated; and it is doubtless impressed on the minds of multitudes, that we are, in reality, about to see this direful scourge of the East—that the earth is to be covered and the land darkened, and every herb of the land and all the fruit of the trees is to be eaten, and that no green thing is to remain in the trees or in the herb of the field. All this honest misrepresentation and consequent panic, [illegible] how much there is in a name. these stories are in no important particular applicable to our insect. At your request, therefore, I offer the following, as the best account I can give of them. And why does not the entomologist do as great a service to the public, by being able to to dissipate their groundless fears, as the astronomer, who by his labors, has taught us the cause, period and harmless nature of an eclipse, a phenomenon which is still regarded by the untaught savage with consternation.

The truth is, our Locust is not a *Locust*—it belongs to an entirely different order of insects. Its history, so far as I have been able to collect it is as follows.—It belongs to the genus CICADA of the order *Hemiptera*, section *Homoptera*. Some of the CICADIADÆ have long been celebrated for their musical powers; so much so, that a portion of them have been grouped together and distinguished by the name of *Cantatrices*, or singers. Their music, which is peculiar to the males, is not produced by the mouth, but by a musical instrument, something like a kettle drum in construction, situated under the chest and covered by two large scales or plates. They live on trees and shrubs, the juices of which they suck. For this purpose they are provided with a long, pointed tube, composed of several distinct pieces, which they fold underneath them when not in use. From the perforations which some of them make in a species of ash *(Ornus)* exudes the substance so well known to us under the name of manna. The female is provided with an ovipositor or auger, of a horny substance, about a third of an inch in length, usually resting in a sheath or groove in the body. This is composed of three pieces, two of which are spear-pointed and finely indented at the end with teeth like a rasp. With this she perforates obliquely the solid substance of the small twigs, and then forming the three pieces into a tube, conveys her eggs through it into the opening. Having filled this with eggs, she moves a little, either along the limb or directly sideways, and performs the same operation until she has deposited all her eggs, which usually amount to from 500 to 700. The eggs are long, white and shining, and somewhat resemble herds grass seed. The perforations are marked by little elevations, caused by small splinters fixed at one end and detached at the other, thus serving as a lid or valve to the opening; and they look as if they might have been produced by shot, driven in at an angle of 45 deg. Virgil supposed that these grooves were actually caused by the bursting of the very shrubs from the loud and querulous music of the insect. They usually select dry twigs for this purpose, probably because the moisture of a green one would prove injurious to their eggs; and in the case of the seventeen year species, the shrub oak is most frequently sought. When the eggs are hatched, the young larvæ immediately enter the earth, which they reach either by travelling down the tree, or according to some, by the dropping of the dead twig to the ground before they are hatched. In the earth they remain in a nymph state till the seventeenth summer, from which circumstance they receive their specific name, *Cicada septemdecem*. Of their developement or mode of life in this state, little, if any thing, is known, though a course of observations is now in process from which we may hope to learn something, if the observers should be permitted to live out this insect's term of life. Probably, however, they are rather useful than injurious, by keeping down a superabundant growth of herbage.

Dr. Shurtleff, in a preceding number of your paper, by comparing the records of the appearance of the *C. septemdecem*, thinks there must be some mistake as to their period of appearance. This discrepancy is easily and satisfactorily removed. It is the same as to say that because calves may be born every month in the year, the period of gestation for the cow cannot be nine months. The seventeen year Cicada is in fact seen every year in *some part* of our land, and perhaps nearly every year in the *same place*, in small numbers. In 1831 I received specimens of it from Sandwich, Mass., in 1832 from Genesee Co. N. Y., in 1833 from Martha's Vineyard, and this year they are abundant in various parts of our land, especially at the south. Thus it will be readily seen how the same family or swarm shall appear and propagate only once in seventeen years, while members of other families may exhibit themselves at any time in the intermediate period.

There are several species of Cicada among us, to be found every year, but none of them in such vast numbers as to conceal the foliage and bend or even break down the branches on which they lodge, as does this species. Among them are the *C. pruinosa*, the most common, and the *C. tibicen*, which last measure two and a half or three inches in length, and it is said that the noise of a single individual is such that it may be heard a mile. The *C. septemdecem* may be distinguished from all the others in our land by its smaller size, being about an inch long, its black body, and the eyes

and nervures of the wings, usually of the color of brick dust or sealing wax.

As to their inclination or ability to do harm, these are both very small. What they do while under ground, as before observed, we know not. While among us, their only object seems to be, to pair, and deposit their eggs. For this purpose they live a merry day or two, subsisting on a few drops of sap, and stunning our ears with their noisy din, and then become a plentiful source of sustenance to many birds and beasts. It is said that the American savages have sometimes used them for food, but I am not aware that they are ever employed as such by civilized man. It is also said that life has been destroyed by them.—We can easily conceive them to have the power of inflicting severe wounds when confined in a hat or otherwise, by their powerful ovipositors, and these wounds may even prove fatal. But, on the whole, the Cicada is quite as harmless, and far less annoying than the musquito. Its deafening din is far more tolerable than the shrill and quiet hum of the latter, and its hydraulic apparatus consumes a far less vital portion of our precious substance, than the sanguinary lance of the musquito.

A short comparison of the Cicada with the true locust *(Gryllus)*, will at once show the difference between the two insects, and the little reason there is to be alarmed at its appearance. The locust belongs to the order ORTHOPTERA, the cicada to the order HEMIPTERA. The form of the locust and its habits are the same as our grasshoppers, which are, indeed, our locusts:—that of the cicada, as is well known, is very different. The two grand differences, however, are, that the locust attains its whole growth above ground; and that, too, in the space of a month or two, and consequently requires a large amount of herbage to maintain its growth. While the cicada has obtained its full size and development when it first emerges from the ground, and requires little or nothing to support it during the few days of its existence. And again; the locust is furnished with powerful jaws for masticating his food, while the cicada has only a tube for taking in fluids, and is utterly incapable of devouring any thing. Apologizing for this long communication, I remain,

Yours, &c. AUGUSTUS A. GOULD.

July 3d, 1834.

IMPORTANT INVENTION.

Saftey. THE apparatus for checking carriage wheels, invented by R. Jarvis, Esq. is worthy of public attention. It can be fitted to any vehicle, old or new, for a moderate expense, and is easily managed.

It will be useful in confining horses, or preventing them from running away, when harnessed to vehicles and left standing without being tied.

Applied to stage coaches, it will put the horses under the command of both passengers and driver; the means for checking either fore or hind wheels terminating inside of the coach, within reach of the former, and also forward within reach of the latter. Should the driver in stopping leave his horses untied, or should he attempt to race, or be thrown from his seat, or should the horses attempt to back over a bank or precipice, the wheels can be instantly checked by the passengers. So should the coach contain no passengers, and the horses attempt to back or run, the wheels can be checked by the driver.

It will be useful on fire engines, in suddenly stopping them when necessary, and thus preventing the accidents that sometimes occur from their rapid movements.—*Boston Traveller.*

From the Cultivator.

CANADA THISTLE.

THE suggestion of our correspondent in the following communication, that frequent ploughing will destroy the Canada thistle, is in confirmation of the practice of Mr. Hillhouse, as related in the May number of the Cultivator. The object of both gentlemen was the same—to prevent the plant from vegetating; while the one used the plough, the other substituted the hoe for that purpose, and both it appears were effectual; these communications contain important suggestions, and we have no doubt they will be acted upon by some of our farmers the coming season.

We have this moment been called upon by a neighbor to the gentleman who sent us the above communication, who says the practice of killing the thistle in the above instance, as related by our correspondent, was so completely successful, that where any are now left, this plan to subdue them is invariably resorted to—that a small farm in the vicinity was sold a few years ago at the moderate price of not more than $25 per acre, because the ground was almost covered with the thistle—that the method of frequent ploughing was adopted by the purchaser, and the thistles are so perfectly subdued that hardly a single one can now be seen, and this same farm would now readily sell at double the original price. We cannot for a moment doubt the correctness of the above statements, and if frequent ploughing is the remedy to destroy the thistle, a knowledge of the fact ought to be most extensively diffused. A.

I am happy to perceive the attention of a subscriber is drawn to the destruction of the Canada thistle. What he writes is from actual experience, the best school extant. The gentleman's mode of destroying that most noxious of all weeds, (the Canada thistle) I conceive to be based on just principles, viz: that of totally depriving it of a top through one summer. This is an effectual mode of eradicating them; but I think we may pursue a system of management, where there are large quantities of this thistle in a more sure and effectual way, than the one in your May number of the Cultivator, signed by a Subscriber.—What I here state is also from actual experience. For the last four years I had two farms which were harassed more or less by the above named thistle, one of them being a small farm, was almost overrun with it, so much so, as to almost ruin both the grass and grain crop.—My mode of treatment is, to plant the field one year. That will subdue the sod. The next year commence as soon as the thistles come up in the spring to plough them, and continue to plough them, say once in two or three weeks, or as often as they come up or appear, until it is time to sow the field with winter grain. By this time the thistles if attended to as directed will be totally destroyed. I have killed last season full ten acres in this way; the season before as many more, and three years ago from one to two acres. Small spots may be wholly kept down in pasture fields by salting stock upon them, and at the same time see to them as often as once a week, that there are no tops left. If there are, strong brine, when the ground is moist poured upon them, will kill them, but if you kill all that are in sight to-day, in one week examine and you will find more, so that it requires attention or else you will lose your labor; there is no half-way work about it; when they are bad in a stone wall the best way is to remove it to some other place not infected with them. The number of times of ploughing required to kill mine, has varied from five to ten times, and when the ground is bare, you can plainly see whether you have destroyed them or not.

If the above article should be the means of assisting the destruction on one square rod of ground covered with Canada thistle, the writer will be fully recompensed.

A SUBSCRIBER.

Chatham, Col'a co. N. Y. May 12, 1834.

From Goodsell's Farmer.

INSECTS ON APPLE TREES.

IN many parts of the country apple trees are much injured by small insects upon the bark, which are commonly denominated lice.

These insects soon after they are hatched from the egg construct a covering over themselves, upon the bark, shaped somewhat like the one-half of a flax-seed, of a light brown color, which is capable of defending them from the weather, and also from many external injuries which might otherwise destroy them.—Beneath this shelter the parent insect supports itself, by perforating the bark through to the sap or young and tender part of the year's growth, upon which it feeds until the season arrives for its metamorphosis, when it changes shape, and deposites the eggs for the next generation and dies. These eggs hatch about the last of May, or from that time until the middle of June, according to the weather; after which they emerge from the shell made by the parent, crawl a short distance, generally upwards, fix themselves upon a smooth place on the bark, and in turn commence building each a shelter, for himself, perforating the bark and feeding upon the sap as before. By cutting beneath them with a sharp knife, a small brown speck will be discovered, indicating their perforation, and when they are very thick, the whole bark appears, when cut much injured, and of a brown color.

From the time of the hatching of the eggs, until they have formed their covering, they are easily destroyed, either by washing the trees thus infected with soap suds, or by washing and at the same time rubbing the tree with a brush, a coarse rag, or something of the kind, by which most of the insects will be destroyed by force, and those detached without being injured by force, will be destroyed by the solution.—Strong ley will answer the same purpose. Soft soap is sometimes used alone, which answers the double purpose of destroying the insects, and acting as a manure for the trees, as it is carried down to the ground by continual rains.

In applying soap or ley to fruit trees for the destruction of insects, it should be applied as far up the branches as possible, without getting it upon the leaves, as when of sufficient strength for the desired purpose leaves would be injured by it.

Some make use of lime instead of soap or ley, applying it as a whitewash; this gives the bodies of trees a very neat appearance, and no doubt prevents the ascent of many insects as well as the multiplication of others, but we do not think it so effectually destroys the small insects alluded to, as the other application.

From the Cultivator.

THE CATERPILLAR.

As much complaint is annually made of the ravages of the caterpillar among the farmers' fruit trees, and particularly in apple orchards, I feel desirous of rendering some service to the public by furnishing a remedy, which, from actual experiment, I am satisfied is effectual.

Place a sponge or swab made of rags, on the end of a pole, saturate it with lye made from common wood ashes; with this preparation give their nests a thorough washing early in the morning before these mischievous animals have gone abroad for their food. This will instantly prove fatal to them. Be careful to break the web of the nest because they are so constructed as to shed the rain and dews, the animal will thus escape. Not one of them can live a minute after being wet with this liquid. Yours respectfully,

DAVID HUDSON.

J. BUEL—I see you have an article in the Cultivator, directing how to destroy the caterpillar.

I will state what I know to be a fact, that is, take a pail of soap suds, and with a swab attached to the end of a pole, swab the nest in the morning, and it will kill the worms and destroy the eggs. It is the best remedy I ever saw, and the quickest and cheapest. A. BRIDGES.

Milford, May 17.

From the Maine Farmer.

SPEAR GRASS.

DURING the last season, a writer in your paper gave his brother farmers some very good and practical advice respecting spear grass. He asserted that it was a worthless grass, and easily removed, at least for the present in all arable land. From this hint one of my brother farmers informed me, that he set his plough a moving and turned in the worthless stuff, (that would not have yielded him more than enough per acre to have paid for the labor of mowing,) and sowed his land to oats and peas, and without manure. He procured a very large crop, and in addition he got rid of his spear grass at least for a number of years; for if he sowed it down to clover it would give a valuable return, and the land thus made to yield a good profit. I write to second the views of the writer above referred to, and to say that his hints have done good; and as I am not one who likes to see a farmer allow land to produce spear grass or any thing which gives him no profit, when it can be avoided at very little expense, and made to return him a handsome income, I hope all our farmers will plough up and destroy this pest, and that they will consider the difference between fencing and paying taxes for land that gives no profit, and the same soil rightly managed and giving a highly profitable crop. We farmers do not calculate enough.

A FARMER WHO SOMETIMES USES FIGURES.

LAND FOR CULTIVATION.

OUR correspondent in the following communication has touched upon an important subject. It will set farmers to thinking, and we trust lead them to important results. The writer is a practical farmer. We shall be glad to hear from him again.—*Portland Courier.*

"We believe that few farmers are fully aware of the importance of selecting the best land for cultivation. We will for example take two pieces of ground—With the same dressing and same amount of labor, one piece will produce 25 bushels corn per acre, the other piece will produce 30 bushels corn per acre—making a difference (reckoning corn at the common price) of 5 dollars—sown to gain the different value of the crops on these two pieces will be two dollars per acre—and when laid down to grass mown for six years, the difference as above may be fairly estimated as decreasing from 2 to 1 dollar per acre. This will give an average difference of 2 dollars per acre for eighty years, a sum which at first glance would seem small and hardly worth the notice of the cultivator. But the question is, what is the difference of value in two pieces of ground! We cannot conceive the two dollars to be anything else than interest which will make the principal thirty-three dollars, the actual difference per acre between these two pieces of land. If we are right in the above conclusion (and if wrong we would solicit your correction, Mr. Editor,) it will be perceived that the relative value of land is far from being justly based, and that farmers should not be afraid of a little expense in clearing and fencing ground, where the soil is good and adapted to cultivation.

From the Maine Farmer.

INDIAN CORN.

I HAVE long been of the opinion that corn is the most uncertain and expensive crop our farmers attempt to raise, and that it would be well if the quantity should be limited to what is wanted for the fattening of their pork. Our seasons are not always sufficiently long to insure its perfection. Its growth, for a time is even more rapid than at the South, but does not all times arrive at maturity before the frost overtakes it. Much may be done to obviate this difficulty. An experiment was tried this season (it may not be a new one) to sprout the corn preparatory to planting; and it was attended with complete success. A hole was dug in the ground where a large heap had been burnt, to where the earth was about blood warm, four quarts of corn was put in and covered up with the warm earth taken out. The next day it was examined, and found sprouted. On the third day it was uncovered and taken out, bound together in one mass by the sprouts which were from an inch to an inch and a quarter long. In this case it was difficult to get the kernels apart without breaking the sprout, but that might be easily obviated by opening a larger surface to spread the corn in. I do not know that this has been practised by our farmers; if not it is worth trying. A pile of brush-wood, the pruning of their apple trees, or even the small chips left in the door-yard, which every neat farmer ought to burn, will heat the ground sufficiently to try the experiment; but the case alluded to, was where logs had been piled and burnt off for the purpose of clearing the land; of course the ground was heated to a considerable depth.

PYRITES

—ARE inflammable substances composed of sulphur and iron or other metal, abounding probably in many parts of our country which are destitute of gypsum. In Flanders pyrites are used as manure particularly for grass lands, at the rate of about six bushels to the acre; the stone is sufficiently impregnated with sulphur to burn, when dry; when red with burning the fire is extinguished before it becomes black, and it is then easily reduced to powder.

MASS. HORTICULTURAL SOCIETY.

AN adjourned meeting of the Mass. Hort. Society was held at their room on Saturday, July 5th.

There being no business before the Society, the sub-committee appointed at a former meeting made choice of the following committees, to make arrangements and preparations for the ensuing exhibition:—

To procure a suitable Hall for Exhibition, I. P. Davis, B. V. French, and J. P. Bradlee.

To solicit the loan of plants and flowers—and to ascertain the kinds and procure a list of such as it may be desirable to obtain—for Boston, I. P. Davis, Geo. W. Pratt, I. P. Bradlee, J. G. Joy, Wm. E. Payne.—For Charlestown, Lynn and Salem, David Fosdick, Thos. Mason, A. Houghton, jr. H. A. Breed, E. Putnam.—For Cambridge, Brighton, Watertown, &c. Jona. Winship, C. M. Hovey, David Haggerston, John Kenrick, J. W. Russell, Wm. Carter.—For Roxbury, Dorchester and vicinity, Saml. Walker, Thos. Brewer, John Lemist, M. P. Wilder, E. M. Richards, N. Davenport.

To attend to the financial department, procure tickets, &c. E. Vose, I. P. Davis, Dr. S. A. Shurtleff.

To conduct the necessary arrangements for the transportation of plants, to, and from the place of exhibition, Jona. Winship, Geo. W. Pratt, J. P. Bradlee.

Adjourned to Saturday, July 12, at 11 o'clock, A. M. CHAS. M. HOVEY, *Sec. pro tem.*

All the members named in the above committees are requested to meet at the Room of the Society on Saturday next, at the hour mentioned in the adjournment; as a prompt attendance is the only means by which the objects of the committees can be conducted with any effect.

EXHIBITION OF FLOWERS.

Saturday, July 5th, 1834.

Mr. SAMUEL DOWNER, Dorchester—large specimen of Greville Rose of various colors and shades.

Mr. THOMAS MASON, Charlestown Vineyard—Amsonia salicifolia, Papaver warratah, variety of Larkspur, do. Roses, double Ranunculus, Anemones, Delphinium grandiflora, Carnations, Moss roses, Potentilla grandiflora, and a variety of other flowers.

Mr. J. A. KENRICK, Newton—Lonicera Fraseri and Chinensis, Calycanthus florida, Pæonia fragrans, Glycine frutescens, Spirea levigata, Magnolia glauca, Roses, &c.

Messrs. HOVEY, Cambridgeport—Bouquet flowers, Delphinium, Digitalis, Lychnis, Campanula, Roses, Pinks, &c.

Mr. S. WALKER, Roxbury—Multiflora Rose, open culture, and specimens of various kinds.

Mr. WM. KENRICK, Newton—a great variety of Roses and other flowers.

Messrs. WINSHIPS—variety as usual.

By order of the Committee,

JONA. WINSHIP, Chairman.

FRUITS EXHIBITED.

Saturday, July 5th.

Royal Scarlet *Strawberries* from Messrs. HOVEY & Co.—*fair* quality.

Black Tartarian *Cherries*, from Mr. POND, Cambridgeport, and Downton *Strawberries*—all fine.

For the Committee on Fruit,

S. A. SHURTLEFF.

From Goodsell's Farmer.

EXPLANATION OF AGRICULTURAL TERMS.

(Continued from No. 49 of this Vol. N. E. Far.)

62. *Tiller*—is a term used to signify the branching out of a single grain as of rye, oats, or wheat, into several stalks. Where the individual kernels of any grain throw up many stalks, it is said to tiller well. Each shoot thrown out in tillering may be removed and treated as a distinct plant.—A remarkable instance of this is related in the fifty-eighth volume of the Philosophical Transactions. Of some wheat sown in June, one of the plants was taken up in August, and separated into eighteen parts, and replanted; these plants again taken up, divided in the month of September and October, and planted out separately to stand the winter, which division produced sixty-seven plants. They were again taken up in March and April, and produced five hundred plants; from which grew twenty-one thousand, one hundred and nine heads, yielding three pecks and three quarters, of wheat, all produced from one single grain.

63. *Ley*—a term used in agriculture, to signify land in a state of sward or grass. We frequently read of wheat being sown on a *clover ley*, by which we are to understand land, in clover, directly after mowing being turned up, and sown in wheat on the back of the furrows.

64. *Meadow*—grass land for mowing. In this country the word is seldom used to signify upland mowing but that which is low and moist, and seldom or never ploughed. In other countries and by some writers on agriculture in this country, it is the name given to *all ground*.

65. *Effluvia*—are those small particles flowing out of any substance, which produce in us the sensation of smell. Thus most flowers send forth effluvia; and substances in a state of putrefaction send forth effluvia of a very different nature.

66. *Chemistry*—is the science which enables us to discover the nature and the properties of all natural bodies.

67. *A Simple Substance*—is one which cannot be decomposed; or which is not produced by the union of two or more substances, such as iron, sulphur, &c. Sir Humphrey Davy, a celebrated chemist in England, reckons forty seven known substances in nature.

68. *A Compound Substance*—is one which may be decomposed; or which is produced by the union of two or more other substances of different natures. Thus, gunpowder is a compound substance, being composed of charcoal, sulphur, and saltpetre; and these substances, or those which united together, produce a compound substance, are called its *constituent* or *compound parts*.

69. *The Elements of Matter*—are the simple substances into which all surrounding objects are capable of being reduced. All the substances about which agriculture is employed are compounds; they consist of elements into which they are capable of being resolved. Of this no farmer should be ignorant; and he ought to attain at least to so much chemistry as to know the nature, the properties, and the combination of those elements (the number of which is very small,) which are continually working such wonders before his eyes.

70. *Analysis*—is the resolution or separating of a compound substance into elements or constituent parts.

71. *Caloric*—is the name which modern chemists have given to fire; it is that extremely subtle fluid which produces in us the sensation of heat. The sun is the grand source of caloric; it is afforded also from combustion, and in various other ways. Thus take a small phial half full of water, grasp it gently in one hand, and from another phial pour a little sulphuric acid, or oil of vitriol as it is sometimes called, very gradually into the water. The phial will become hot, which is in consequence of the caloric disengaged from the mixture. This subtle matter pervades the pores of all known substances, most of which are capable of existing in *three different states*—the solid, the fluid, and the aeriform or gaseous state; and these different states depend on the quantity of caloric which may be present in any substance at *any one time*. The first of these termed *the solid state*, depends on the presence of *a small quantity of caloric*; such is water in the state of ice;—when the quantity of caloric or matter of heat is increased to a certain degree the body passes into the second or *fluid* state; such is the ice or lead when melted; and by still farther increasing the quantity of caloric or heat, it rises into vapor, called the *aeriform* or *gaseous state*, or simple GAS. Almost all natural bodies are susceptible of existing from the mere expansive energy of caloric, in these three states; and the only difference among them is, that some require *less* and others *greater* portions of caloric to induce these changes. Water which usually exists in our atmosphere as fluid, can fluctuate by a very slight alteration of the thermometer, either into *solid* ice, or into aeriform vapor. All the metals exhibit the same phenomenon. If solid they melt by the application of fire into a fluid mass; and if that be carried to a given pitch of intensity, they fly off in fumes, and assume the gaseous state. The solid earth is not exempt from the dominion of this universal law. Flint and sand, when put into the furnace dissolves into liquid glass, and if exposed to a still more powerful heat, may dissipate in vapor and assume new ærial forms. Let it therefore be remembered, as an established principle in chemistry, that when different portions of *caloric* enter into combination with bodies, they pass according to the quantity, into the respective states of solidity, fluidity or æriform vapor.

72. *Gas*—is any substance converted to vapor by the action of caloric. In other words, it is any substance reduced to the æriform state by the action of caloric. By the *aeriform state* it must be remembered is meant *a state similar to that of air*; which is neither *tangible* nor *visible*; that is, it can neither be handled with the hands nor seen with the eyes. It may seem strange that the hard substance from which we receive so many knocks and brushes, should in any way be converted into such a state. Yet something of this is seen every day. A log which would require two men to lift, on being burnt is all converted into gas, except a residuum of ashes so small as to be collected into a measure and carried by a child. So in the putrefaction of an animal, the solid substance left is little more than sufficient to cover the ground: the rest, except some fluid parts which may have sunk into the soil, is converted into gas.

73. *Alkalies*—are substances of an acid burning taste. Their most distinguishing properties are, 1st, They change the blue juices of vegetables, as of violets or red cabbage to green. 2d, They render oils mixable with water, thus forming soap. 3d, They combine with acids, thereby forming various kinds of salts. There are only three alkalies: 1st, Potash, or the vegetable Alkali; 2nd, Soda or Mineral Alkali; 3d, Ammonia, or the Volatile Alkali. The two first are also called *Fixed Alkalies*: the latter, or Ammonia, is called the *Volatile Alkali*, because it exists as a gas, and is that substance which on opening a smelling bottle so effectually searches the nose and head.

74. *Acids*—are substances of a sour taste. The acids are very numerous. Their most distinguishable properties are, 1st, That they change to *red* those colors of vegetables which the alkalies change to *green*; 2d, They combine with alkalies, and thereby form a great many kinds of salts.—Thus the combination of muriatic acid with soda, forms common salt. Some of the acids are met with in a solid state: others in a fluid state, as vinegar: others in a gaseous state. Of the latter is Carbonic Acid, which requires a more particular description. The carbonic acid, when uncombined with any other substance, is always met with in a state of *gas*, and hence it is called *Carbonic Acid Gas*. It is the substance which was formerly called *fixed air*. It exists in a small proportion in the atmosphere. It destroys life and extinguishes the light of a candle when immersed in it. It is disengaged largely from liquors, such as beer, cider, or wine, when in the act of fermentation. It is this gas which produces the many unhappy accidents in some subterraneous caverns, inclosed cellars containing large quantities of fermenting liquors, in some deep wells, and in bed-chambers, warmed by burning charcoal in pans. This acid combines with a great variety of substances, all which are called *carbonates of lime*, and the burning of limestone is for no other purpose, but to expel the carbonic acid, which is done by heat, in which operation the limestone loses nearly half its weight. The alkalies attract it from the atmosphere. It is present in pot and pearl ashes, from which it is disengaged by the addition of a stronger acid, as every one may have seen in throwing pearl-ash into cider, as some people do to drink in the morning. The acid in the cider in uniting with the pearl-ash, displaces the carbonic acid, which rises in the form of gas through the liquor, producing much foam with a hissing noise, called *effervescence*.

75. *Atmospheric Air*—or the air which surrounds the earth, is a mixture of two different kinds of air, called *Oxygen* and *Azote*. It likewise contains a small proportion of Carbonic Acid Gas, a substance already described. It is well known that no animal will live, or fire burn without air called *oxygen*, which is necessary for both. It is this which supports life and combustion; and when there is no oxygen, an animal will die, and a light will be extinguished as suddenly as where there is no air at all. All this may be made plain by a very easy experiment. Take a lighted candle, put it into a candlestick, and set it into a pail of water so deep that the light of the candle may rise three or four inches above the surface of the water. Then take a deep tumbler, or a wide mouthed decanter, invert it and let it down over the candle till the brim shall dip into the water. As the candle continues burning the water will be seen rising in the decanter till it shall be about one quarter full, when the candle will suddenly go out. Now the reason of water's rising in the decanter is, because the oxygen is gradually consuming by the lighted candle; and the reason the candle goes out is, that the oxygen at that instant is all gone, or has been

expended in the combustion. What is then left in the decanter, will be the other part or kind of air called *Azote*, and if a small animal should be introduced into this air, it would die as suddenly as if it had no air at all. Oxygen gas (for you must remember that every substance in the form of air must be called gas) is a very wonderful substance. It unites with iron when exposed to the atmosphere for any length of time, and converts it into rust, it unites with melted pewter or lead, and converts them into dross or oxide, as it is called; it unites with another kind of gas, called *Hydrogen* and forms water. Yes, what perhaps it may surprise you to know, *water* is not a simple as most persons suppose, but a *compound* substance, composed of Oxygen and Hydrogen gas. Both its decomposition and composition are common experiments in every chemical room. Oxygen likewise is one of the ingredients in the composition of acids, all which are compound substances; hence Oxygen has been called the great *acidifying* principle. Thus it unites with sulphuric acid, or oil of vitriol as it was formerly called: it unites also with carbon or charcoal, when burning, and forms carbonic acid gas, already described; and hence we see how the carbonic acid gas, which sometimes proves fatal in close shut bed-chambers, heated with burning charcoal, is produced. The oxygen in the atmosphere unites with the charcoal or carbon in burning, and thus produces this gas, so deleterious to life when breathed without a due proportion of atmospheric air mixed with it. These four elementary substances, *Oxygen*, *Hydrogen*, *Azote*, and *Carbon* possess a very wonderful agency in nature, and every one who has any wish to look beyond the mere surface of things, cannot but be gratified in knowing more about them. It is important that the character and distinguishing properties of each should be well understood. These are given in the following concise definitions, which are not to be forgotten; viz:—

76. *Oxygen*—is one of the constituent principles of water; it is called vital or respirable air, and is essential both to the support of life and combustion. This substance performs an important part in most of the changes which take place in the mineral, vegetable and animal kingdoms.

77. *Hydrogen*—is one of the constituent principles of water; it is very inflammable, and was formerly called inflammable air. It is the lightest of all ponderable substances. This is the substance generally used in filling air balloons. It is readily obtained by the decomposition of water. Vegetables and animals, also in a state of decay and putrefaction, afford it, and it is evolved from various mines and volcanoes.

78. *Azote*—is that part of atmospheric air which is incapable of supporting life or combustion. All combustible substances burn violently in pure oxygen gas, and if it was not diluted in the atmosphere by a large portion of azote, it would be impossible to extinguish any considerable fire when once lighted up, and something like the general conflagration of the whole world would immediately commence. Azote exists abundantly in nature, forming the greater part of the atmosphere, and is one of the principal ingredients in animal substances.

99. *Carbon*—is the pure part of charcoal. Carbon forms a large proportion of all vegetables; it exists also in animals, but its quantity is small.

From the Virginia Farmer's Register.

ON THE MANUFACTURE OF POTASH.

It is remarkable that the manufacture of potash which has formed so considerable and profitable an employment for the industry of the northern States, has never been in operation in Virginia. Of course no satisfactory answer to the following letter of inquiry on this subject was to be obtained at home—and it was therefore sent to a gentleman who resides at Cayuga county, New York, whose location, as well as his general information, it was inferred would enable him to give the statements required. He has kindly complied with the request, by sending the communication inserted below.

The enormous waste of wood throughout Virginia and the southern states, induces me to inquire whether a considerable saving to the country may not be effected, by converting a portion of it into potashes, and by preparing the bark of certain descriptions of trees, for tanning and dyeing.

In clearing our lands, it is the practice to burn all the wood which is not used for fence rails, and no care is taken of the ashes. It is well known that from the branches and twigs of oak, a larger quantity of potash is obtained than from the same weight of the trunk of the tree, and that the branches are entirely lost with us in clearing land.

Now my object in addressing you is to request that you will obtain and publish the most simple and clear directions for making and preparing potashes for market, embracing the cost of all requisite apparatus, labor, &c. and the quantity produced from a given weight or measure of white oak, red oak, and other woods common to our country. The preparation of bark for exportation might also be valuable, if the mode of doing it was made known to our farmers. QUERIST.

William Culver, Esq. from whom the following particulars were obtained, has been concerned in the manufacture of potash for many years.

It is estimated that 450 bushels of good *house ashes* will make a ton of potash. Some skilful workmen can produce more. The manager of his works contracted to make a ton from every 425 bushels; and he has even made that quantity from 420 bushels; but it is more than common workmen can produce.

Of *field ashes* about 550 bushels are required to make a ton. This difference is owing to impurities, and a want of compactness in the ashes. Great care should be used in scraping them up, so as to exclude as much dirt as possible. It requires more care to work them.

At this time, house ashes are worth ten cents a bushel, at the ashery, and field ashes seven cents.

One man can manage an ashery, consisting of the different vessels hereafter to be mentioned. There ought to be six leaches (or leach tubs,) each ten feet long, constructed in the following manner: Lay two parallel sills, *one a little higher than the other*. On these *the bottoms* of the leaches are laid—made of boards four feet long, not grooved and tongued, but *breaking joints*. These should be a foot high from the ground, so as to admit a trough under the lower edge to catch the ley, and to lead it into the ley tub, which may be a half hogshead sunk in the ground, and which will serve for *two* leaches.

The boards four feet in length which constitute the sides of the leach, are held together by two rectangular frames; the lower one resting on the bottom is eighteen inches, and the upper, near the top of the leach, three and a half feet wide.

On the bottom of the leach lay small sticks crossing each other, to the height of two inches, for the purpose of letting the ley run off freely. On these place straw, to be four inches thick when well pressed down, to prevent the ashes from washing through and mixing with the ley. Three bushels of lime to each leach are spread on the straw; its effect is to facilitate the melting of the potash. Every *third* time that the leaches are filled, new lime is to be applied, after ejecting the old.

The ashes when thrown into the leaches must be made compact by pounding it down. In this way a leach will hold 60 bushels.

The leaches are worked in pairs. One pair may be *running* while the second is *soaking*, and the third is being *emptied* of old ashes, or being *filled* with new. This arrangement prevents the workman from losing time by waiting, or from being too much hurried at another time.

Two potash kettles of 90 gallons each, are wanted for boilers, and may cost about $35 apiece. These are set in arches. Several sugar kettles, containing about twenty gallons each, will also be wanted for *coolers*.

The manufacture of potash is generally commenced in the spring, when there is no longer any danger from freezing.

Ley too weak to bear an egg, is not put into the boilers, but is used for wetting such leaches as have not begun to run.

During the boiling, a *dipping pan* is placed in each boiler, resting on the bottom, to catch the *black salts* as they settle; and when the pan is full, it is emptied from time to time. By this process, the ley will not become so thick, and consequently evaporate faster.

When the strong ley (such as will bear an egg,) from the *two* leaches, is all poured into the boilers, then increase the fire. For this purpose, *good dry wood is necessary*. The black salts are now to be *returned* to the boilers; and there will be a danger of the liquid running over. This is prevented by dipping it up and pouring it back into the boiler. Repeat it till this disposition to rise over shall disappear. Then raise the heat still more, till the potash is perfectly *melted*, and becomes almost as thin as water. It is then to be dipped out into the coolers, *being careful to have them* VERY DRY. Let the potash stand till next day—it will crack into four quarters. Turn it out, and it is fit to barrel.

My informant suggests that there would be a great advantage in having some person to start the works, who was well acquainted with the business.

D. T.

LOCUSTS.

We have been disposed to ridicule the reports circulated in the papers, of the death of several children from the sting of locusts. But we learn that the *bite*, of this noisy visiter, *has*, in several instances, proved fatal. A black boy, in or near Newcastle, (Del.) last week, gathered several locusts, and put them in his hat, to be carried to school. While thus confined the animals bit his head in several places; in a short time the places bitten became inflamed; the head swelled very much, and the boy died in a few hours afterwards. We saw several sores on a person's hand, caused by the bite of locusts.—*Philad. U. S. Gazette.*

NEW ENGLAND FARMER.

BOSTON, WEDNESDAY EVENING, JULY 9, 1834.

MASSACHUSETTS AGRICULTURAL SOCIETY.

At the annual meeting of the Massachusetts Society for Promoting Agriculture held 11th June last, the following gentlemen were elected:

Hon. Thomas L. Winthrop, President;
Hon. John Welles, 1st Vice President;
Hon. Peter C. Brooks, 2d Vice President;
Hon. Richard Sullivan, Corresponding Secretary;
John Heard, jr. Esq. Treasurer;
Hon. John C. Gray, Recording Secretary;
Benj. Guild, Esq. Assistant do.;
Trustees—E. Hersey Derby, Esq., Hon. William Prescott, Hon. Daniel Webster, Israel Thorndike, Esq., Henry Codman, Esq., Josiah Quincy, jr Esq.

CLOSE OF THE TWELFTH VOLUME.

The present number closes the third volume of the new series, and the twelfth volume since the commencement of the New England Farmer. The termination of each volume presents a stage in our progress, in which we have been accustomed to look about us, and intimate what the view affords relative to the interests of the community of cultivators as well as to our own situation and prospects as regards the work in which we are engaged.

Many causes, since the establishment of our paper in 1822, have co-operated to encourage the hearts and strengthen the hands of the numerous and respectable class of mankind engaged in cultivating the earth. The progress of improvement in other arts has a tendency not only to augment the demand for the productions of agriculture, but to excite, enlighten and reward every effort to increase the quantity, enhance the quality and facilitate the means of obtaining those commodities which are indispensable to the existence of a great, active and intelligent population. Canals, rail roads, the multifarious methods and devices for employing steam, waterfalls, and other agents of super-human strength—laborers, which require no supplies of food or raiment, never suffer from fatigue, and never fail if skilfully employed to accomplish their tasks, have been set to work by mechanical ingenuity, in the service of agriculture; and made to reciprocate benefits with the great art, which is the source, support and indispensable requisite of all other arts. Agricultural implements, and the intelligence which renders them most effective have, also, since the period above mentioned been invented and brought into action in numbers and efficacy exceeding the most sanguine anticipations of the friends to improvement.

By the operation of the above mentioned and other agents in the train of causes and effects, connected with the progress of cultivation, lands in tillage have, in many instances, been made to double their products with the same amount of human labor. Improved breeds of animals, new articles and modes of husbandry, have also contributed to make the pursuits of the cultivator less laborious as well as more profitable. When Science speeds the Plough, Wealth and Honour are awarded to the Ploughman. With these considerations to cheer and encourage us, we propose to persevere in our attempts to render our journal still more useful and acceptable to the public. We solicit the aid of friendly and patriotic correspondents to enable us to accomplish those objects above mentioned. We should be thankful to receive for publication, descriptions of improved implements, machines, &c. new and useful plants, improved breeds of animals, and all other articles useful or ornamental, which promise to give interest to the Farmer, and profit to its patrons and perusers.

Volumes of the New England Farmer for Agricultural Premiums. In the List of Premiums to be awarded by the Agricultural Society in Washington, Penn. in October next, we were much gratified to observe that sundry volumes of the New England Farmer are included. The most successful cultivators are to be rewarded by those most appropriate of all donations which not only afford encouragement and compensation for past, but contribute means for future improvement. We hope our New England Agricultural Societies will do likewise, and not suffer us to send all our good works to the other end of the Union, instead of distributing a part among our good neighbors.

N. B. Volumes of the New England Farmer, commencing on the 16th of July, 1834, will be furnished to Agricultural Societies, to be distributed for premiums in any number.

While speaking of encouragement afforded us by Agricultural Societies we cannot forbear to tender our thanks to *the Rhode Island Society for the Encouragement of Domestic Industry*, for their continued and liberal patronage of the New England Farmer.

☞The Index to the present Volume will be issued with the next Number if practicable, but if not, with the succeeding one.

From the Maine Farmer.

GARGET.

It cannot be otherwise than gratifying to the feelings of every one who is interested in the prosperity of our State, to view the general excitement which appears to be waking up in relation to the improvement of the breed of stock. But in proportion as our improvements progress, it becomes a matter of importance for us to acquire and disseminate every item of information within our reach for the prevention and cure of those disorders to which our cattle are mostly subject.

It is well known that the Garget prevails among cows in this State to a very serious degree; and I believe in general the best cows are the most liable to have it, which often renders them as to milk, partially or wholly valueless. A friend of mine suggests the propriety and utility of raising Garget, (Phytolacca decandra.) His plan is to box up a small corner of the barn-yard and fill it with rich earth; in this the berries may be planted or the roots or plants set, so that the cattle may have free access to it through the season. He says that in the incipient stages of the disorder the cows will instinctively crop the leaves of the plant, and thus become their own physicians.

His cows have never been troubled with the garget since he has adopted this method, although he suffered considerably prior to it; and he very justly observes, that in those States where this plant grows in abundance, the garget among cows is unknown.

The Phytolacca decandra, or garget, is common in almost all countries. In Europe, it is found in Switzerland, Milan, Florence, Portugal, and Piedmont. I believe it is also a native of Japan. In America it inhabits a very extensive tract of country from New Hampshire to Mexico, and perhaps farther south. It generally grows along roadsides, along hedges, and in old fields. This is the proper season for setting the plants. The berries are at first of a green color, then red, and when fully ripe they are black; and the proper season for gathering them is in October, when they become soft and ripe. The root of the plant is to be gathered in November when the stalk is perfectly dead, and a bunch of berries may be planted in its stead at the same season of the year.

Its medicinal qualities have been held in high estimation by some, in Fevers, Cancers, Scrofula, Rheumatism, Gout, Dysentery, Eruptions, &c. It operates both as an emetic and cathartic, in its different preparations and application.

If a variety of names applied to a plant is in any way indicative of its usefulness, then surely this must be eminently so; for we find that in different places it is known by one or more of the following names: Garget, Cunicum, Cokecum, Julap, Poke, Poke-weed, Pork-weed, Pork-physic, Red weed of Virginia, Virginian Poke, Branching Phytolacca, Skoke Cancer-root, American nightshade, and Red nightshade. But in New England, I believe it is mostly known by the name of Garget.

Carolus.

June 21, 1834.

ITEMS OF INTELLIGENCE.

The Locust. These noisy visiters have been with us about a month, and the extinction of the present generation of them is apparent from the numbers that are found dead, and the feeble tones of the remainder. The power applied to their incisors in penetrating the young branches of trees, wherein to deposit their eggs, is almost incredible. We have twigs of last year's growth, upwards of a quarter of an inch in thickness, penetrated to the heart by these insects.—*Harrisburg Chronicle.*

Northern Adventure. Among the adventurous excursions planned by Englishmen for the present summer is one to visit a mountain between the 66th and 67th degree of north latitude, not far distant from Tornea, at the extremity of the Gulf of Bothnia, from which point, during the latter part of the next month the sun may be seen at midnight. The facilities for this undertaking are, however, greater than is generally imagined. By the steamboats from Hull, Stockholm may be reached in eight days, and the river may be ascended in boats to nearly the point desired; while to those who prefer travelling by land, relays of horses, which are abundant in that country, are to be obtained on moderate terms. The natives go from great distances to visit the spot mentioned, and to pass Midsummer-eve on the mountain, of which a species of festival is made, (from the varieties of costume and rustic finery,) said to be of a very striking and picturesque effect.

Cat and Rabbits. On a journey recently, while stopping for a short time at the house of a gentleman in Orange, Vermont, we were somewhat interested and amused at seeing a lot of young rabbits nursed by a cat.—The owner of the cat had destroyed two of her kittens, preserving only one.—The night after she took to the woods, returning in the morning with two young rabbits, and the next night, repeating her visit, brought home a third, all of which she has adopted, and the kitten and three rabbits are thriving together, under the impartial and affectionate attention of Grimalkin.—*Portsmouth Jour.*

The present number of members of Temperance Societies in England and Wales in 80,198, showing an increase during the last month of 3,621, of whom 783 are the produce of 14 new societies.

There is an orange tree in Versailles which is still vigorous and flourishing, and is ascertained to be over 400 years old. It is called the Bourbon, and belonged to the constable of that name in the beginning of the 16th century, and confiscated to the crown in 1522, when it was already 100 years old.

Singular Tree. We have observed, on the farm of Mr. George Pettit, a mile below the village, a somewhat curious tree. A large chesnut, four feet in diameter, was felled close to the ground, some years since, and a number of scions, to the amount of twenty, have sprung out of, and ranged themselves around the edge of the stump in regular succession, forming a complete circle, and leaving the centre perfectly empty. These scions are now from three to five inches in thickness, and the whole resembles more the precision of art than the irregularities of nature.—*Hempstead (L. I.) Inq.*

Effects of the May Frost in Ohio. The following is an extract from a letter of a correspondent at Loydsville, Ohio, dated June 17, 1834:

"The frosts have been terrible. All the standard fruits are dead—one eighth exotic gooseberries left—more natives—currants plenty; also, native strawberries—the cultivated kinds chiefly killed. Grapes all killed, except a few dormant buds that pushed forward after the frost. The leaves of the fox grape were not killed. The Isabella stood the freeze on the 27th April—thermometer 27 deg. before sunrise; but was killed 15th May, thermometer 25 deg. All other kinds, including the wild chicken grape, were killed by the first frost. Forest trees were generally killed. No rain of consequence since last frost. The wheat killed has sent out suckers, and the crop will have short straw and heads, but may be tolerably fair."

To destroy Caterpillars.—To fifteen gallons of water add 1 1-4 pounds of common soap, the same quantity of flowers of sulphur, and 2 pounds of mushrooms, (the poisonous kind.) Put the whole over a moderate fire and keep it stirring. Caterpillars, grubs, &c. watered with this liquor, immediately perish.

This recipe is said to come from Germany, where it has extraordinary success.

Scotch Method of preserving Eggs. Dip them during one or two minutes in boiling water. The white of the egg then forms a kind of membrane, which envelopes the interior and defends it from the air. This method is preferable to the varnish proposed by Reaumer.

Substitute for India Ink.—Boil in water some parchment, or pieces of fine gloves, until it is reduced to paste. Apply to its surface while still warm, a porcelain dish which has been held over a smoking lamp: the lamp-black which adheres to it will become detached and mingle with the paste or glue. Repeat the operation until the composition has acquired the requisite color. It is not necessary to grind it. It flows as freely from the pencil as India Ink, and has the same transparency.

The use of Gunpowder on the *Fourth* has caused a number of distressing accidents, but it is thought not so many as in former celebrations.

DISHLEY, OR NEW LEICESTER SHEEP.

Two Rams and one Ewe, with her Ewe Lamb of four months old, of the pure breed as above—were imported from England last year from one of the most celebrated flocks, superior as a *large mutton breed*, and also very heavy fleeces of long combing or worsted wool.

Also, a very fine, 3 year old Bull, 3-4 blood Durham Short Horn.

Apply to JOHN PRINCE.

Jamaica Plains, June 25th, 1834.

WHITE DUTCH CLOVER.

RECEIVED this week direct from Holland 1000 lbs. superior White CLOVER, warranted free from any kind of foul seed, and at least worth one third more than American. This will be found an excellent Grass for Pasture land, &c.

a16 GEO. C. BARRETT, New England Seed Store.

ISLAND IN THE WINNEPISEOGEE LAKE FOR SALE.

Will be sold at public auction, on the premises, on THURSDAY, the seventeenth day of July (unless previously disposed of at private sale,) the Island in Winnepiseogee Lake known as MERINO ISLAND.

This island is situated within the limits of Tuftonborough, N. H. about 35 miles from Concord, and one quarter of a mile from the mainland. It contains between five and six hundred acres, and is admirably calculated for a sheep and dairy farm, for which it has for several years past been very successfully cultivated. It is in two parts, connected by a neck two rods wide. One part (of which about one half is cleared, and the other in forest) contains the pasture, nearly 300 acres in extent, of very high and sweet feed—the other part, about 200 acres, (of which two thirds are cleared,) contains all the buildings, which are extensive and very convenient, having all been erected by the present proprietor within ten years. There is a comfortable farm house, of 48 by 24 feet; a barn 80 by 40, with a shed up to the eaves on three sides, of 15 feet wide for sheep; another barn of 50 by 30 feet for cattle and horses; a dairy and cheese house, with ice house connected; corn-barn, and wind-mill, nearly new.

At the same time and place, will be sold the STOCK now upon the island, consisting of about 500 Sheep and Lambs, of the best merino and Saxony blood; an imported Bull (full blood North Devon); about 30 Cows and Heifers, chiefly of the Alderney and Durham breeds; a yoke of Oxen, and two yoke of Steers. The horned stock are all very superior animals, and the butter and cheese from this dairy has commanded the highest prices in Boston for the last three years.

Also, two MARES, four and five years old, sired by Barefoot, of much promise; one other Mare;—also the Swine—and all the Farming Tools.

☞The Steamboat leaves Alton on Tuesdays, Thursdays and Saturdays, and Centre Harbor on Mondays, Wednesdays and Fridays, and will land passengers on the island.

For terms and conditions of sale, apply to PRESCOTT & DERBY, No. 16 Court st. Boston, and for view of the premises to Capt. PILSBURY, on the island. jy 2

DAMAGED BISHOPS LAWN AND MUSLINS.

ELIAB STONE BREWER, at No. 414 Washington Street, will open for sale this day,

1 Case wet (but not damaged) Bishops Lawn.
1 do. do. do. Book Muslin.

Also, 1 do. Superfine 6-4 Cambric Dimoties, which will be offered by the Piece at 25 per cent. less than cost of importation. m 14

STRAW CARPETING.

ELIAB STONE BREWER, No. 414 Washington street, has received a lot of 106 pieces superior straw carpeting white and fancy checks, 5-4, 6-4, and 7-4 widths, which he will sell by the piece or yard at very low prices. Also, Canton Straw table matts. istf. a 16.

C. G. GREENE'S

IMPROVED SILK REEL—PRICE $20—For sale at the Agricultural Warehouse, No. 52 North Market Street, and by the Patentees, Windsor, Vermont. ap 23

FRUIT TREES.

ORNAMENTAL TREES, ROSES, FLOWERING PLANTS, &c. NURSERY of WILLIAM KENRICK in NEWTON, 5½ *miles from Boston by the City Mills, and ¼ a mile from the Worcester Rail Road.*

A rare collection of Fruit trees, Trees and shrubs of ornament, Roses, Dahlias, &c. This Nursery now covers compactly, the most part of 16 acres; and includes of Trees and plants in different stages of growth, from two to three hundred thousand. Of *new celebrated Pears alone*, 150 kinds, a part of which having been already proved in our climate, are especially recommended. Of Peaches, a Capital Collection, for extensive numbers and fine kinds—Apples—Cherries—Plums—Nectarines—Apricots—Almonds—Quinces—Grape Vines—Currants—Raspberries—Gooseberries—Strawberries—Figs, &c.—Selections from the best varieties known.

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PRICES OF COUNTRY PRODUCE.

			FROM	TO
APPLES, russets,		barrel	2 75	3 00
BEANS, white,		bushel	2 00	2 12
BEEF, mess, (new)		barrel	10 00	
	Cargo, No. 1	"	7 50	7 75
	prime,	"	6 00	6 25
BEESWAX, (American)		pound	18	22
BUTTER, inspected, No. 1, new,		"	12	14
CRANBERRIES,		bushel	3 00	3 25
CHEESE, new milk,		"	8	9
	skimmed milk,	"	3½	5
FEATHERS, northern, geese,		"	40	45
	southern, geese,	"	35	40
FLAX, American,		pound	9	10
FLAXSEED,		bushel	1 37	1 62
FLOUR, Genesee,	cash.	barrel	5 00	5 25
	Baltimore, Howard str. new	"	5 37	
	Baltimore, wharf,		5 25	5 50
	Alexandria,	"	5 25	5 37
GRAIN, Corn, northern yellow,		bushel	73	75
	southern yellow,	"	70	71
	white,	"	69	70
	Rye, (scarce) Northern,	"	75	75
	Barley,	"	60	65
	Oats, Northern, (prime)	"	40	43
HAY, best English,		ton	20 00	21 00
	Eastern screwed,	"	12 00	13 00
	Hard pressed,	"	13 00	15 00
HONEY,		gallon	36	46
HOPS, 1st quality		pound	9	12
	2d quality	"	7	8
LARD, Boston, 1st sort,		pound	8	8½
	Southern, 1st sort,	"	7	7½
LEATHER, Slaughter, sole,		"	17	18
	upper,	lb.	10	12
	Dry Hide, sole,	pound	15	17
	upper,	lb.	18	20
	Philadelphia, sole,	pound	21	23
	Baltimore, sole,	"	22	24
LIME,	best sort	cask	85	90
PORK, Mass. inspec., extra clear,		barrel	17 00	18 00
	Navy, Mess,	"	10 00	13 50
	Bone, middlings,	"		
SEEDS, Herd's Grass		bushel	2 37	2 50
	Red Top, northern, (none),	"		
	Red Clover, northern,	pound	7	8
	White Dutch Honeysuckle	"	28	35
TALLOW, tried,		cwt	7 00	7 50
WOOL, prime or Saxony Fleeces,		pound	58	62
	American, full blood, washed	"	50	55
	do. 3-4ths do.	"	45	50
	do. 1-2 do.	"	37	42
	do. 1-4 and common	"	30	35
	Native washed,	"	38	40
Northern pulled,	Pulled superfine,	"	50	55
	1st Lambs,	"	43	46
	2d "	"	30	35
	3d "	"	25	29
	1st Spinning,		45	48

Southern pulled wool is generally 5 cts. less per lb.

PROVISION MARKET.

RETAIL PRICES.

HAMS, northern,	pound	9½	10
southern,	"	8	9
PORK, whole hogs,	"	6½	7
POULTRY, (uncertain)	"		
BUTTER, (tub)	"	12	14
lump, new,	"	18	20
EGGS,	dozen	14	15
POTATOES,	bushel	28	35
CIDER, (according to quality,)	barrel	2 00	3 00

Faneuil Hall Vegetable Market, July 9, 1834.

Radishes, 3 cents—New Onions, 6 cents—Turnips, 6 cents—Lettuce, 3 cents—Cucumbers, from 6 to 8 cts apiece—Peas, $1 a bushel—Early York Cabbages, 75 cents per doz. or 6¼ cts. apiece—Carrots, 6 cents a bunch—Beets, 10 cents—Strawberries, 25 cents a box—Gooseberries, 12½ cts. a quart—Cherries, 12½ to 25 cts pr quart—Rhubarb Stalk, 8 cts pr lb.

BRIGHTON MARKET.—MONDAY, July 7, 1834.

Reported for the Daily Advertiser and Patriot.

At Market this day, 290 Beef Cattle, 28 cows and calves, 2275 sheep, and 50 swine.

PRICES. *Beef Cattle*—A falling off from last week of nearly 25c per hundred lbs. the cattle generally being of an unusual good quality, a few were sold nearly as high as last week. We quote prime at 5 67 a 6; good at 5 50; thin at 4 25 a 4 75.

Cows and Calves—Sales were effected at 18, 21, 22, 24, 25, 27½, 30, and one at $40.

Sheep—There was a great difference in the quality, and sales were effected to correspond. We noticed lots taken at 1 33, 1 53, 1 42, 1 62, 1 71, 1 88, 2, and 2 17; also lots at 2 25 and 2 37. Wethers at 3, 3 33, and 3 50.

Swine—We noticed one lot of large hogs, more than half barrows, taken at 5c.

MISCELLANY.

From the Pearl.

TO THE SUN.

BY MISS A. C. LYNCH, OF HARTFORD.

THOU glorious lamp of Space! Thou that dost flood
The void of heaven with brightness! in thy glow
Unnumbered worlds, age after age, have trod
In their appointed paths, and yet thy flow
Of lustre hath not ebbed.—Before thy brow
The stars still veil themselves—thy burning glance
Is all unquenched, undimmed, unchanged e'en now
As when the finger of Omnipotence
Pointed to thee thy throne amid the vast expanse.

Yes, all unchanged.—As on that morn when rang
The shouts of joy as forth thy rays were spread,
While all the morning stars together sang,
So thou art now! The morning stars have fled,
The towering hill with age has bowed its head,
The sea has changed its home with the dry land,
The earth has gathered in her countless dead
Again and yet again—but thou dost stand
Exhaustless and unmoved, upheld by God's own hand!

Thy beams rest not alone where monarchs dwell,—
They linger round the cottage of the poor,
And pierce the gratings of the captive's cell—
And when thou lookest on the lowliest flower
That lifts its head to thee but for an hour,
Thy glances just as mildly, gently burn
As when thou gazest on the loftiest tower,
Or on the countless worlds that round thee turn.
Oh! what a lesson here might human frailty learn.

Thou lookest upon the earth, and in thy rays
She brings her increase forth. Thine early light
Unfolds the bud, and thy intenser gaze
The blushing summer flower. Thou takest thy flight
And o'er the earth then walks the starry night.
Thou guidest the waters of the unquiet main
Whose billows foam and tremble in their might—
For o'er the winds of heaven thou holdest thy reign
From the soft flower-kissed breeze to the wild hurricane.

When I behold thy bright, alchemic glance
A flood of gold-light o'er the landscape throw,
Or every cloud that decks the blue expanse
Beneath thy gaze with deepening blushes glow,
Or when I see thee tint the heavenly bow,
Or with thy gaze the ice-bound waters melt
As spring returns before thy burning brow,
I wonder not that Persia's children knelt
And deemed thou wast the Heaven wherein the Eternal dwelt!

Thou isle of brightness mid an azure sea!
As oft I gaze on thee at closing day,
I feel my spirit fluttering to be free,—
To cast its bonds of ignorance away,
And learn thy mysteries—and then I say
Peace my sad thoughts! but yet a little time
And your frail prison will have changed to clay
And ye shall stand before the throne of Him
To whose veiled brow of light this glorious lamp is dim!

FIRE.

ACCORDING to Pliny, fire for a long time was unknown to some of the ancient Egyptians; and when Euxodus, the celebrated astronomer, showed it to them, they were absolutely in raptures.

The Persians, Phœnicians, Greeks, and several other nations, acknowledged their ancestors were once without the use of fire; the Chinese confessed the same of their progenitors. Pomponius Mela, Plutarch, and other ancient authors, speak of nations, who, at the time they wrote, knew not the use of fire, or had but just learnt it. Facts of the same kind are also attested of several modern nations.

The inhabitants of the Marian islands, which were discovered in 1521, had no idea of fire. Never was astonishment greater than theirs, when they saw it on the descent of Maghellan on one of their islands. At first they believed it to be some kind of animal that fixed itself to and fed upon wood. The inhabitants of the Philippine and Canary Islands were formerly equally ignorant. Africa presents, even in our days, some nations in this deplorable state.—*Park's Chemical Essays.*

ANTIQUITIES OF SOUTH AMERICA.

THE following article appears in a late number of the Monthly Review.

A German merchant residing at Valparaiso in Chili, who is a great amateur of antiquarian research, some time ago engaged an intelligent Dane named Kenons, to explore some of the wild regions of Chili, which probably had never before been visited by European travellers. This man is said to have made the most interesting discoveries. Among the Andes of Chilon he has found an extensive plain, over which were scattered the ruins of a considerable city. As the Indians of Chili have always been nomades, and as the incas never succeeded in establishing their power in that country, it may be concluded that the city above mentioned was built and inhabited by a civilized people, who have subsequently entirely disappeared. It is alleged that in other parts of South America there have also been discovered traces of high civilization, no remains of which are observable among the Indians who now inhabit those countries.

SAGACITY OF ELEPHANTS.

ELEPHANTS in peace and war know their duty; and are more obedient to the word of command than many rational beings. It is said they can travel on an emergency, two hundred miles in forty-eight hours, but will hold on for a month at the rate of 40 or 50 miles a day with cheerfulness and alacrity. I performed my long journey upon an elephant given by Ragobah to Col. Keating; nothing could exceed the sagacity, docility and affection of this noble quadruped; if I stopped to enjoy a prospect, he remained immovable until my sketch was finished; if I wished for ripe mangoes, growing out of the common reach, he selected the most fruitful branch, and breaking it off with his trunk, offered it to the driver, for the company in the houdah, accepting of any part given to himself with a respectful salaam by raising his trunk three times above his head, in the manner of the oriental obeisance, and often did he express his thanks by a murmuring noise. When a bough obstructed the houdah, he twisted his trunk around it, and though of considerable magnitude, broke it off with ease, and often gathered a leafy branch, either to keep off the flies, or as a fan to agitate around him, by waving it with his trunk. He generally paid a visit to the tent door during breakfast, to procure sugar candy or fruit, and to be cheered by the encomiums and caresses he so deservedly met with; no spaniel could be more innocently playful, or fonder of those who noticed him, than this docile animal, who, on particular occasions appeared conscious of his exaltation above the brute creation.—*Forbes.*

PRIVATE LIFE IN A PUBLIC HOUSE.

A PERSON from the country, who had been some months landlord of an Alnwick public house, was complaining to his friends of the dulness of trade, and said, if he could make up his mind to lead a retired private life he would certainly keep a public house at Alnwick.—*Newcastle Press.*

FOR THE CURIOUS GRAMMARIAN.

THERE is some ingenuity in the grammatical play upon the word THAT in the following lines which we copy from the Catskill Recorder, though they do not appear to be original in that paper. One would hardly believe it possible, without seeing an example, that any word in the English language was so variable in its signification, that it might be used *seven* times in succession without any intervening word, and yet preserve sense and grammatical correctness. The last line but one contains the word THAT *seven* times, which may be parsed as follows:—

The first is a conjunction; 2d is a demonstrative adjective pronoun agreeing with the 3d; the 3d is a noun, the nominative to *is* in the following line; the 4th is a demonstrative adjective pronoun agreeing with the 5th, the 5th is a noun in apposition with the 3d; the 6th is a relative pronoun referring to the 5th for its antecedent and governed by *began;* and the 7th is a noun and governs began.—*Portland Argus.*

GRAMMATICAL TAUTOLOGY.

I'll prove the word that I have made my theme
Is that that may be doubled without blame;
And that that *that* thus trebled I may use,
And that that *that* that critics may abuse
May be correct. Further the Dons to bother—
Five *thats* may closely follow one another!
For be it known that we may safely write
Or say, that that *that* that that man writ was right;
Nay, e'en that that *that* that *that* that followed
Through six repeats the grammar's rule has hallowed;
And that that *that* (that *that* that *that* began)
Repeated seven times is right!—Deny it who can.

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